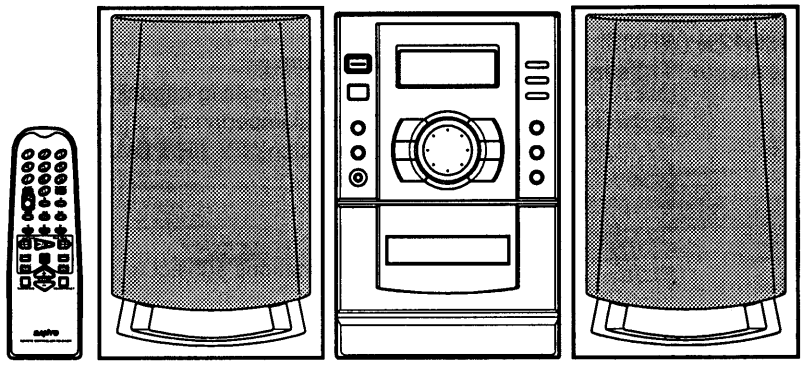
SANYO

FILE NO.

Service Manual

Micro Component System

DC-DA300 (UK) (XE)
DC-DA301 (XE)



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PRODUCT CODE No.
129 568 00 (UK)
129 568 01 (DC-DA300/XE)
129 568 07 (DC-DA301/XE)

This service manual consists of "DC-DA300U" [DA300] (Main unit : 129 567 00 [UK], 129 567 01 [XE]), "DC-DA301U" [DA301] (Main unit : 129 567 07), "RB-DA300" (Remote control), "SX-DA300" [DA300] (Speaker system : 165 003 00 [UK], 165 003 01 [XE]) and "SX-DA301" [DA301] (Speaker system : 165 003 05).

REFERENCE No. SM5810056

SPECIFICATIONS

Tuner

Reception frequency ..... FM : 87.5 - 108.0 MHz
MW : 522 - 1611 kHz
LW : 144 - 288 kHz

CD player

Channels ..... 2-channel stereo
Sampling frequency ..... 44.1 kHz
Pick-up ..... Optical 3-beam semiconductor laser
Wow and Flutter ..... Below measurable limits

Cassette deck section

Track system ..... 4-track, 2-channel stereo
Frequency response ..... 60 Hz - 13.5 kHz (Normal tape)
Signal to noise ratio ..... 50 dB
Wow and Flutter ..... 0.12% (WRMS)
Fast forward / Rewind time .... Approx. 110 sec. (C-60)

General

Output power ..... 12.5 W x 2
(at 4 ohms, 10% distortion)
Inputs ..... VIDEO IN : 400 mV / 50k ohms
Outputs ..... SPEAKERS : 4 ohms
PHONES : 8 - 32 ohms
OPTICAL OUT : Optical
Power requirements ..... AC 230 V, 50 Hz
Power consumption ..... 52 W
Dimensions (W x H x D) ..... Approx. 160 x 250 x 213 mm
Weight ..... Approx. 3.2 kg

Speaker system

Type ..... 2-way bass reflex
Unit used ..... Woofer : 12 cm cone type
Tweeter : 5 cm cone type
Maximum
power-handling capacity ..... 25 Watts (peak)
Nominal impedance ..... 4 ohms
Dimensions (W x H x D) ..... Approx. 160 x 250 x 220 mm
Weight ..... Approx. 2.1 kg (per speaker)

Specifications subject to change without notice.

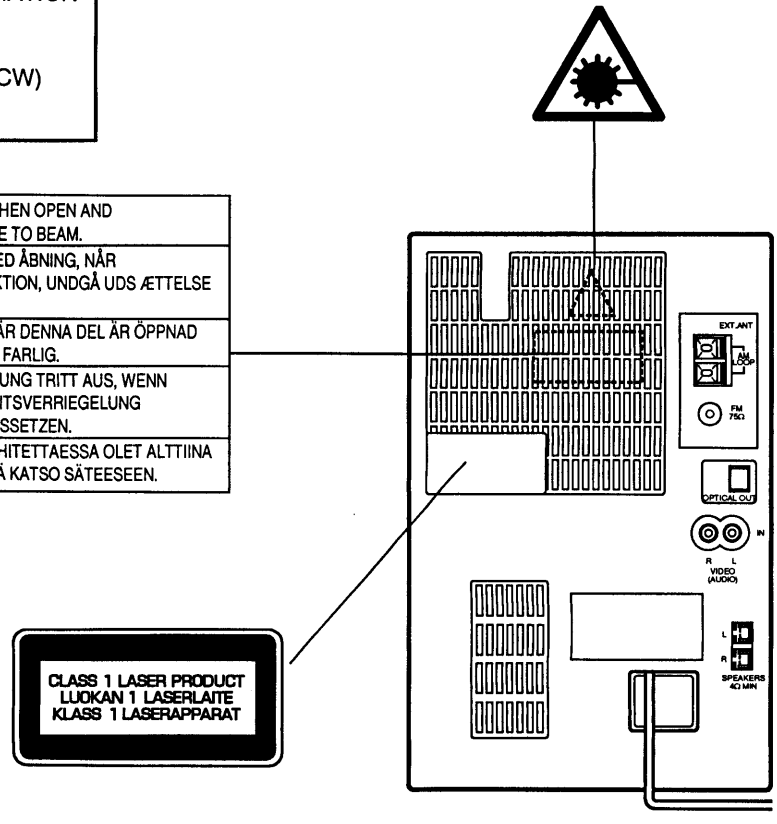
LASER BEAM SAFETY PRECAUTION

- Pick-up that emits a laser beam is used in this CD player section.

CAUTION :
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE

LASER OUTPUT ..... 0.6 mW Max. (CW)
WAVELENGTH ..... 790 nm

CAUTION – INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
ADVARSEL – USYNLIG LASER STRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION, UNDGÅ UDS ÆTTELSE FOR STRÅLING.
VARNING – OSYNLIG LASER STRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRR ÄR URKOPPLAD. STRÅLEN ÄR FARLIG.
VORSICHT – UNSICHTBARE LASERSTRAHLUNG TRITT AUS, WENN DECKEL GEÖFFNET UND WENN SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT IST. NICHT, DEM STRAHL AUSSETZEN.
VARO – AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.



CD PICK-UP MAINTENANCE

About pick-up (Optical lens) Cleaning

Clean a lens with swab of the cotton which moistened it with alcohol, cleaning paper or cleaning disc appointed.

Specified cleaning disc : LC-1 (Part code : 645 026 1961 ..... manufactured by SANYO.)

Show a clean procedure in the following in reference by swab of cotton.

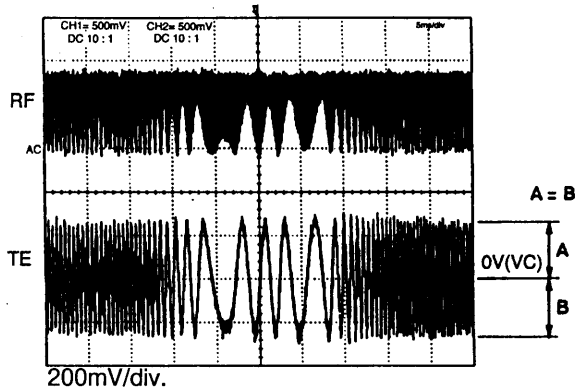
1. Cotton swab is wrapped with Cleaning paper.
2. Add the isopropyl alcohol.
3. Gently move the tip of cotton swab just like a draw a whirlpool from inside to outside on the surface of lens.

CD PLAYER ADJUSTMENTS

1. ADJUSTMENTS

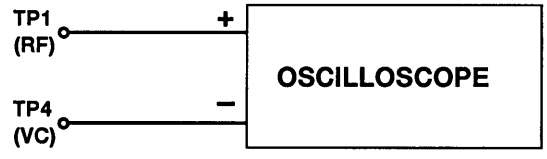
(1) Confirm the tracking balance

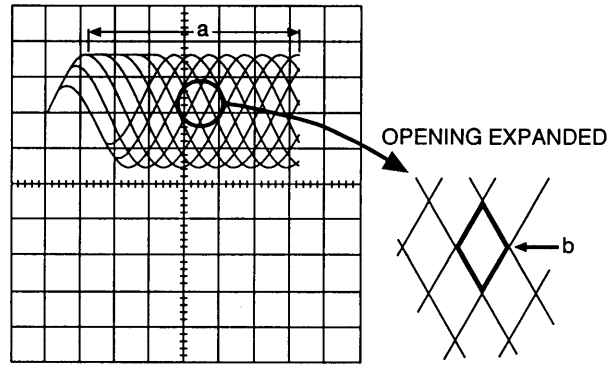
1. Connect an Oscilloscope to TP2 (TE) and TP4 (VC).
2. Turn on the POWER switch.
3. Set the test disc. (DISC 1)
4. Press "MEMORY" button and "BACK SKIP" button simultaneously. Within 1 second after pressing the "PLAY/ PAUSE" button.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0V (VC).



(2) Checking the "eye" pattern

1. Switch "ON" the POWER.
2. Connect an oscilloscope to TP1 (RF) and TP4 (VC).
3. Load the test disc.
4. Press the PLAY button.
5. Check to be sure that the "eye" pattern is at the center of waveform and that the diamond shape is clearly defined.
6. Press the STOP button.
7. Turn off the POWER switch.

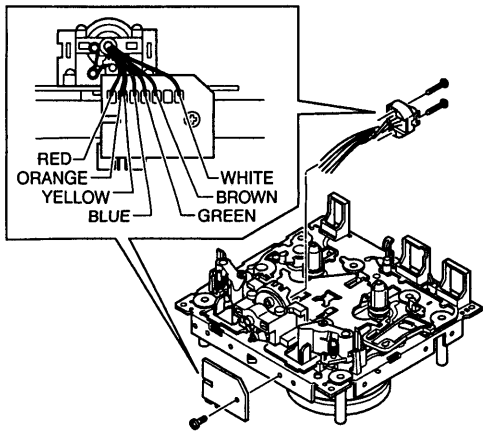




TAPE ADJUSTMENTS

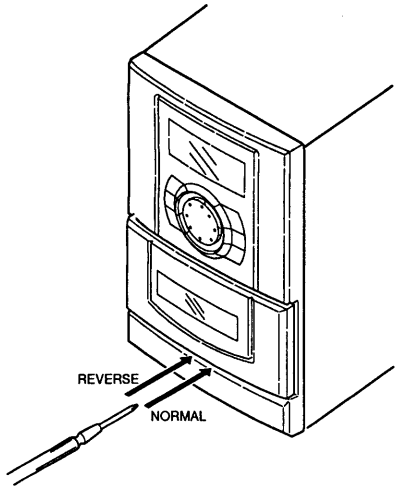
a. Replacing the head

1. After replacement, demagnetize the heads by using a degausser.
2. Be sure to clean the heads before attempting to make any adjustments.
3. Be sure both channels (1 and 2) are the same level. (Using a dual-channels oscilloscope).
4. All wiring should be returned to the original position after work is completed.



b. Adjusting head azimuth

1. Load a test tape (VTT-738, etc. :10kHz) for azimuth adjustment.
2. Press the PLAY button.
3. Use a cross-tip screwdriver to turn the screw for normal azimuth adjustment so that the left and right outputs are maximized at the same phase during normal playback.
4. Play the tape in the reverse mode.
5. Use a cross-tip screwdriver to turn the screw for reverse azimuth adjustment so that the left and right outputs are maximized at the same phase during normal playback.
6. Press the STOP button.



c. Adjusting motor speed

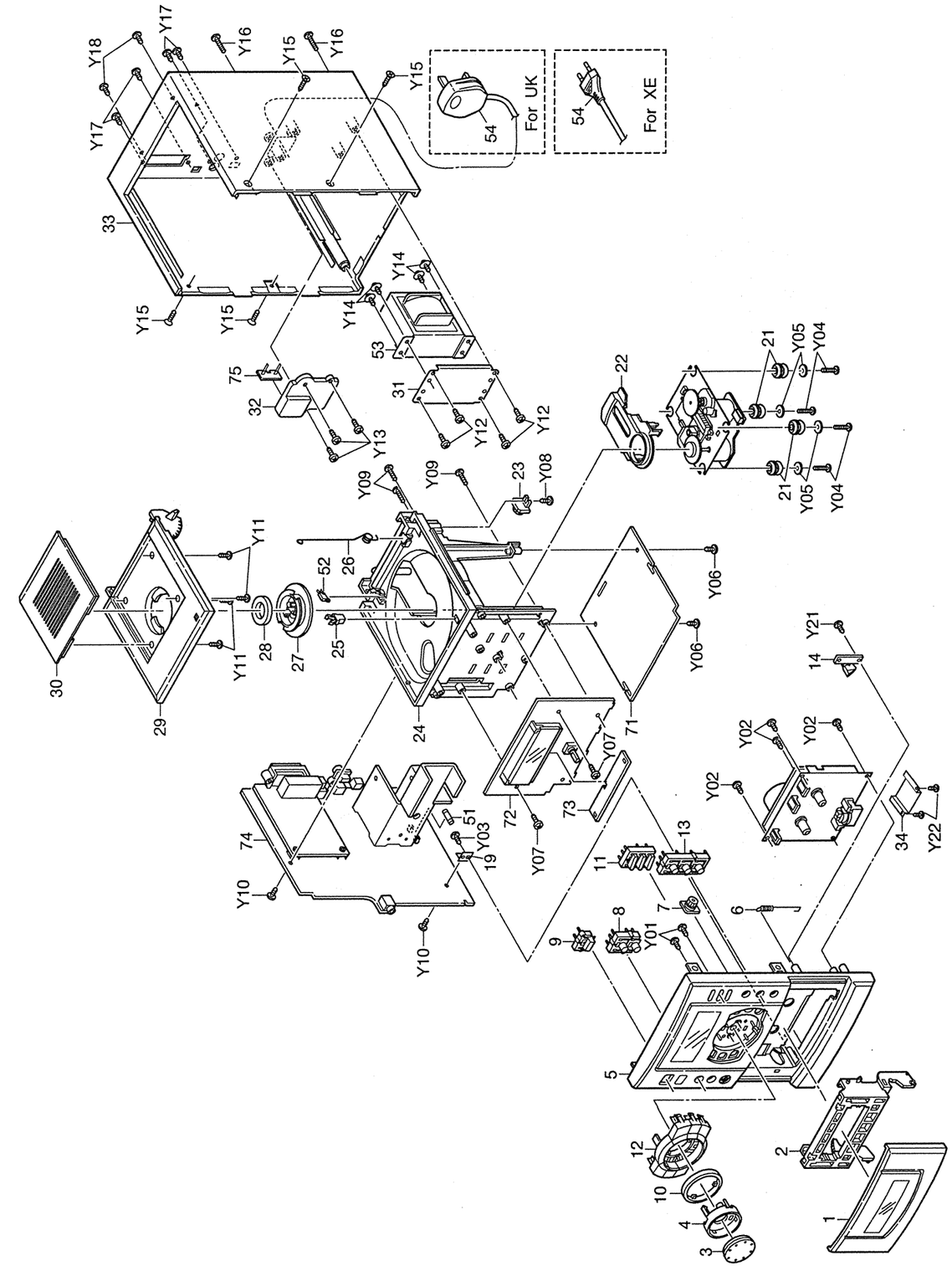
1. Insert the test tape (MTT-111 or etc. 3,000 Hz).
2. Press the PLAY button.
3. Use a flat-tip screwdriver to turn the SVR to adjust so that the frequency counter becomes 3,000 ± 20 Hz.
4. Press the STOP button.

d. Checking the mechanism torques

- Clean the head, capstan and pinch roller before making any measurement.

Measureent	Take-up torque	Back tension	Tape tension
Cassette for measurement	PLAY : TW-2111A F.FWD/REW : TW-2231	PLAY : TW-2111A	Drive-power cassette TW-2412
PLAY	30 ~ 70gr.cm	1.0 ~ 6.0gr.cm	70 gr or more
F.FWD/REW	70 ~ 150gr.cm	-	-

EXPLODED VIEW (CABINET & CHASSIS)



PARTS LIST

PRODUCT SAFETY NOTICE

EACH PRECAUTION IN THIS MANUAL SHOULD BE FOLLOWED DURING SERVICING. COMPONENTS IDENTIFIED WITH THE IEC SYMBOL ⚠ IN THE PARTS LIST AND THE SCHEMATIC DIAGRAM DESIGNATED COMPONENTS IN WHICH SAFETY CAN BE OF SPECIAL SIGNIFICANCE. WHEN REPLACING A COMPONENT IDENTIFIED BY ⚠, USE ONLY THE REPLACEMENT PARTS DESIGNATED, OR PARTS WITH THE SAME RATINGS OF RESISTANCE, WATTAGE OR VOLTAGE THAT ARE DESIGNATED IN THE PARTS LIST IN THIS MANUAL. LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS MUST BE MADE TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE PRODUCT TO THE CUSTOMER.

CAUTION : Regular type resistors and capacitors are not listed. To know those values, refer to the schematic diagram.
Regular type resistors are less than 1/4 W carbon type and 0 ohm chip resistors.
Regular type capacitors are less than 50 V and less than 1000 µF type of Ceramic type and Electrical type.

PACKING & ACCESSORY

REF.NO.	PART NO.	DESCRIPTION
	614 303 1284	CARTON CASE (UK)
	614 303 2724	CARTON CASE (DA300/XE)
	614 306 1762	CARTON CASE (DA301/XE)
	614 303 1291	CUSHION,FRONT
	614 303 0669	CUSHION,REAR
	645 034 7962	POLY SHEET,870X480,SET (UK)
	645 035 1563	POLY SHEET,870X480,SET (XE)
	614 303 1307	INSTRUCTION MANUAL (UK)
	614 303 2748	INSTRUCTION MANUAL (XE)
	614 305 3866	INSTRUCTION MANUAL,GREEK (XE)
	645 005 1227	ASSY,ANTENA,LOOP
	614 229 4635	ANT,FM ANT
	645 034 8778	REMOTE CONTROL,RB-DA300
	645 036 6727	BATTERY COVER,REMOTE CONTROL
	614 305 0247	ASSY,BOX,SPEAKER,SX-DA300 (UK)
	614 305 0520	ASSY,BOX,SPEAKER,SX-DA300 (DA300/XE)
	614 306 1724	ASSY,BOX,SPEAKER,SX-DA301 (DA301/XE)
	614 304 5304	ASSY,GRILLE,SPEAKER
33	614 303 7293	ASSY,COVER,REAR (UK)
33	614 303 7309	ASSY,COVER,REAR (DA300/XE)
33	614 306 1748	ASSY,COVER,REAR (DA301/XE)
34	614 306 6729	SHIELD,DECK MECHA
	614 240 3983	CUSHION,BUTTON REC
	614 298 8886	SPACER,MECHA,DAMPING KSM-213
	614 191 3698	LABEL,LASER MARK
	614 276 2844	LABEL,SAFETY,LASER CAUTION

FIXING PARTS

REF.NO.	PART NO.	DESCRIPTION
Y01	411 021 3503	SCR S-TPG BIN 3X10,P-FRONT+CAP, DECORATION
Y02	411 021 3503	SCR S-TPG BIN 3X10, F-PANEL+DECK MECHA
Y03	411 021 3503	SCR S-TPG BIN 3X10, F-PANEL+HOLDER,MAIN PWB
Y04	411 021 1806	SCR S-TPG BIN 2.6X10, MTG PK-UP+KSM-213
Y05	411 092 0906	WASHER Z 2.6X10X0.5, MTG PK-UP+KSM-213
Y06	411 021 3503	SCR S-TPG BIN 3X10, MTGPK-UP+CD PWB
Y07	411 021 3503	SCR S-TPG BIN 3X10, MTGPK-UP+FRONT PWB
Y08	411 021 3503	SCR S-TPG BIN 3X10, MTG PK-UP+ASSY.GEAR
Y09	411 021 4500	SCR S-TPG BIN 3X16, F-PANEL+MTG PK-UP
Y10	411 021 3503	SCR S-TPG BIN 3X10,MAIN PWB
Y11	411 021 2704	SCR S-TPG BIN 2.6X6, DOOR CD+DEC DOOR CD
Y12	411 021 3503	SCR S-TPG BIN 3X10, C-REAR+HOLDER P-TRANS
Y13	411 021 3503	SCR S-TPG BIN 3X10, C-REAR+STOPPER CORD
Y14	411 020 9902	SCR S-TPG BRZ+FLG 3X8, HOLDER P-TRANS+P-TRANS
Y15	411 098 7701	SCR S-TPG FLT 3X10, C-REAR,L/R SIDE)
Y16	411 021 4500	SCR S-TPG BIN 3X16,C-REAR
Y17	411 021 3404	SCR S-TPG BIN 3X10,C-REAR
Y18	411 021 3404	SCR S-TPG BIN 3X10,C-REAR
Y21	411 021 3503	SCR S-TPG BIN 3X10, F-PANEL+LACH CAM
Y22	411 025 1901	SCR S-TPG PAN 2X3,SHIELD DECK

CABINET & CHASSIS

REF.NO.	PART NO.	DESCRIPTION
1	614 303 1222	ASSY,DOOR,DECK
2	614 302 5115	LID,CASSETTE
3	614 303 5718	KNOB,VR
4	614 302 4941	CAP,DECORATION
5	614 303 1239	ASSY,PANEL,FRONT (UK)
5	614 303 5664	ASSY,PANEL,FRONT (XE)
6	614 303 5794	SPRING,DOOR DECK
7	614 307 1396	ASSY,GEAR
8	614 302 4903	BUTTON,TUNER,2KEY
9	614 302 4859	BUTTON,POWER,1KEY
10	614 302 5238	RING,DECORATION (UK)
10	614 305 7567	RING,DECORATION (XE)
11	614 302 4873	BUTTON,MEMORY,3KEY
12	614 302 4910	BUTTON,PLAY,8KEY
13	614 302 4897	BUTTON,BASS,3KEY
14	614 303 1277	LATCH,CAM,DECK DOOR LOCKING
19	614 304 5700	HOLDER,MAIN PWB
21	614 302 9915	HOLDER,POWER TRANS
22	614 302 4965	COVER,PICK-UP
23	614 307 1396	ASSY,GEAR
24	614 302 5184	MOUNTING,PICK-UP
25	614 303 0263	LATCH,PUSH,CD DOOR LOCKING
26	614 303 0027	SPRING,DOOR CD
27	614 298 8879	PULLEY
28	614 303 0256	LATCH,MAGNET
29	614 302 4996	DOOR,CD
30	614 302 9878	DEC,DOOR CD
31	614 302 9991	STOPPER,AC CORD

ELECTRICAL PARTS

REF.NO.	PART NO.	DESCRIPTION
51	⚠ 423 016 8103	FUSE 250V 4A,PRI. FUSE
52	645 013 5224	SWITCH,LEVER 1P-1T
53	⚠ 645 036 3900	POWER TRANSFORMER

REF.NO.	PART NO.	DESCRIPTION
54	⚠ 645 033 7543	CORD,POWER-1.6MK (UK)
or	⚠ 645 037 6269	CORD,POWER (UK)
54	⚠ 645 016 9939	CORD,POWER-1.74MK (XE)
	645 013 6498	CORE,FERRITE
CN201	⚠ 614 305 1619	ASSY,WIRE,RP-HEADS
CN203	⚠ 614 305 1626	ASSY,WIRE,C-MECHA
CN601	⚠ 645 033 7413	FLEXIBLE FLAT CABLE,CD-PICK UP
or	645 036 3955	FLEXIBLE FLAT CABLE
CN603	⚠ 614 304 1498	ASSY,WIRE,CD-MECH
CN691	645 037 4753	FLEXIBLE FLAT CABLE,FRONT-MAIN
or	645 037 4760	FLEXIBLE FLAT CABLE,FRONT-MAIN

CD P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
71	614 306 4817	ASSY,PWB,CD (Only Initial)
C604	403 058 2901	POLYESTER 0.015U J 50V
C607	403 058 2901	POLYESTER 0.015U J 50V
C612	403 059 8209	POLYESTER 0.22U K 50V
C614	403 060 8700	POLYESTER 0.033U K 50V
C615	403 059 8209	POLYESTER 0.22U K 50V
C620	403 058 9504	POLYESTER 0.018U J 50V
C630	403 056 7502	POLYESTER 1000P J 50V
C631	403 060 8700	POLYESTER 0.033U K 50V
CN602	614 304 1504	ASSY,WIRE,FOR CD MECHA
CN604	614 305 1602	ASSY,WIRE,FOR OPT CONNECT
CP601	645 033 8168	SOCKET,FPC 16P
CP603	645 005 7366	PLUG,2P
D601	407 012 0804	DIODE 1N4148
D602	407 189 3301	DIODE 1N4004A
or	407 012 0309	DIODE 1N4003
D603	407 189 3301	DIODE 1N4004A
or	407 012 0309	DIODE 1N4003
D604	407 099 5204	ZENER DIODE MTZJ5.1B
D605	407 099 5204	ZENER DIODE MTZJ5.1B
D606	407 012 0309	DIODE 1N4003
IC601	409 378 8104	IC LA9240ML
IC602	409 435 2106	IC LC78622NE
IC603	409 372 9602	IC LA6541
L600	645 037 2858	CORE,PIPE
L601	645 001 5519	INDUCTOR,47U K
L602	645 001 5519	INDUCTOR,47U K
L603	645 037 2858	CORE,PIPE
Q600	405 141 3505	TR KTA1266-Y
Q601	405 141 3505	TR KTA1266-Y
Q604	405 138 6403	TR KTD2058Y
Q605	405 143 0007	TR KRC107M-A
or	405 000 3806	TR DTC114YS
R661	402 082 7104	RESISTOR 270 J- 1/2W
X600	645 020 9024	OSC,CRYSTAL 16.9344MHZ

FRONT P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
72	614 306 4848	ASSY,PWB,FRONT (Only Initial)
AM001	614 304 5687	DEC,SHEET,LCD DIFFUSER
BRLCD	614 302 5085	HOLDER,LCD
CP101	645 012 5331	SOCKET,FPC 29P
D101	407 012 0804	DIODE 1N4148
D102	407 012 0804	DIODE 1N4148
D103	407 099 5303	ZENER DIODE MTZJ5.6B
D104	407 099 6003	ZENER DIODE MTZJ9.1B
D114	407 012 0804	DIODE 1N4148
D115	407 099 5204	ZENER DIODE MTZJ5.1B
D116	407 012 0804	DIODE 1N4148
D117	407 012 0804	DIODE 1N4148

REF.NO.	PART NO.	DESCRIPTION
DMC10	407 203 9203	PHOTO DIODE SPS-442-1-E
IC101	410 348 8703	IC CXP83240A-115Q
or	410 349 6302	IC CXP83240A-117Q
IC102	409 451 2203	IC M24C02—MN6
L101	645 001 5441	INDUCTOR,2.2U K
L102	645 001 5441	INDUCTOR,2.2U K
L103	645 001 5441	INDUCTOR,2.2U K
LCD10	645 036 3931	LCD
Q101	405 143 0007	TR KRC107M-A
or	405 000 3806	TR DTC114YS
Q102	405 141 3307	TR KTC3198-GR
Q103	405 155 0002	TR MPSA56
Q104	405 143 0007	TR KRC107M-A
or	405 000 3806	TR DTC114YS
Q105	405 155 0002	TR MPSA56
Q106	405 143 0007	TR KRC107M-A
or	405 000 3806	TR DTC114YS
Q107	405 155 8206	TR KRC110S
SW101	614 220 5471	SWITCH,TACT
SW102	614 220 5471	SWITCH,TACT
SW103	614 220 5471	SWITCH,TACT
SW104	614 220 5471	SWITCH,TACT
SW105	614 220 5471	SWITCH,TACT
SW106	614 220 5471	SWITCH,TACT
SW107	614 220 5471	SWITCH,TACT
SW108	614 220 5471	SWITCH,TACT
SW109	614 220 5471	SWITCH,TACT
SW110	614 220 5471	SWITCH,TACT
SW111	614 220 5471	SWITCH,TACT
SW112	614 220 5471	SWITCH,TACT
SW113	614 220 5471	SWITCH,TACT
SW114	614 220 5471	SWITCH,TACT
SW115	614 220 5471	SWITCH,TACT
SW116	614 220 5471	SWITCH,TACT
SW117	614 220 5471	SWITCH,TACT
VL101	645 033 3460	SWITCH,ROTARY(ENCODER)
X101	645 036 5102	OSC,CERAMIC 10.0MHZ
X102	645 032 1627	OSC,CRYSTAL 32.768KHZ

LED P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
73	614 306 4824	ASSY,PWB,LED (Only Initital)
CN102	614 304 1474	ASSY,WIRE,FOR LED PWB
D105	408 037 4204	LED SLP-3118B-51HAB-T1
D106	408 037 4204	LED SLP-3118B-51HAB-T1
D107	408 037 4204	LED SLP-3118B-51HAB-T1
D108	408 037 4204	LED SLP-3118B-51HAB-T1
D109	408 037 4204	LED SLP-3118B-51HAB-T1
D110	408 037 4204	LED SLP-3118B-51HAB-T1
D111	408 037 4204	LED SLP-3118B-51HAB-T1
D112	408 037 4204	LED SLP-3118B-51HAB-T1
D113	408 037 4204	LED SLP-3118B-51HAB-T1

MAIN P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
74	614 306 4800	ASSY,PWB,MAIN (Only Initial)
	411 021 3503	SCR S-TPG BIN 3X10, HEAT SINK-MAIN PWB
	412 011 6306	SPECIAL WASHER,TR KTB1366Y
C201	403 058 2901	POLYESTER 0.015U J 50V
C209	403 058 2901	POLYESTER 0.015U J 50V
C216	403 060 8700	POLYESTER 0.033U K 50V
C404	403 057 5507	POLYESTER 1200P J 50V
C405	403 058 9504	POLYESTER 0.018U J 50V
C406	403 060 8700	POLYESTER 0.033U K 50V

REF.NO.	PART NO.	DESCRIPTION
C416	403 060 8700	POLYESTER 0.033U K 50V
C421	403 057 3503	POLYESTER 0.1U K 50V
C422	403 057 5507	POLYESTER 1200P J 50V
C427	403 061 3605	POLYESTER 0.039U J 50V
C428	403 061 7702	POLYESTER 4700P J 50V
C429	403 059 3204	POLYESTER 2200P J 50V
C435	403 060 2807	POLYESTER 0.027U K 50V
C507	403 277 4106	ELECT 1000U M 25V
C508	403 277 4106	ELECT 1000U M 25V
C509	403 057 3503	POLYESTER 0.1U K 50V
C510	403 057 3503	POLYESTER 0.1U K 50V
C516	403 154 8500	ELECT 3300U M 35V
CP201	645 006 0885	PLUG,13P
CP202	645 037 5477	SOCKET,FPC 29P
CP203	645 005 9292	PLUG,5P
CP204	645 007 1447	PLUG,2P
CP205	645 006 1875	PLUG,2P
CP206	645 006 1875	PLUG,2P
CP207	645 005 7373	PLUG,3P
D201	407 099 5204	ZENER DIODE MTZJ5.1B
D202	407 127 5008	DO NOT USE MTZJ2.2B
D500	407 012 0804	DIODE 1N4148
D501	407 099 5204	ZENER DIODE MTZJ5.1B
D502	407 063 9702	DO NOT USE MTZJ9.1C
D503	407 196 5800	DIODE 1N5402BD82
D504	407 099 5204	ZENER DIODE MTZJ5.1B
D505	407 012 0804	DIODE 1N4148
D506	407 012 0804	DIODE 1N4148
D507	407 012 0804	DIODE 1N4148
D508	407 099 6201	DO NOT USE MTZJ10C
D509	407 196 5800	DIODE 1N5402BD82
D510	407 196 5800	DIODE 1N5402BD82
D511	407 196 5800	DIODE 1N5402BD82
D512	407 012 0804	DIODE 1N4148
E002	645 006 4760	HOLDER,FUSE
or	645 031 7903	HOLDER,FUSE
E004	645 006 4760	HOLDER,FUSE
or	645 031 7903	HOLDER,FUSE
HP1	645 011 6384	JACK,PHONE D3.6
HS401	614 303 1260	HEAT SINK
HTU01	614 304 5694	HOLDER,TU PWB
HTU02	614 304 5694	HOLDER,TU PWB
IC201	409 445 4503	IC M62439SP
IC401	409 451 7406	IC AN7348K
IC402	409 189 3404	IC BA7755A
IC501	409 451 2104	IC TDA7269
IC502	409 438 6804	IC MM1434XFBE
JACK1	614 276 6835	SOCKET
JACK2	614 240 5703	OPTO CONNECTOR,OPT OUTPUT
L401	645 006 1523	INDUCTOR,470U J
L402	645 006 1523	INDUCTOR,470U J
L403	645 006 1523	INDUCTOR,470U J
L405	645 037 2858	CORE,PIPE
L406	645 037 2858	CORE,PIPE
Q400	405 151 5209	TR KRA107M
or	405 000 0904	TR DTA114YS
Q401	405 141 3307	TR KTC3198-GR
Q402	405 141 3307	TR KTC3198-GR
Q403	405 155 0002	TR MPSA56
Q404	405 143 0007	TR KRC107M-A
or	405 000 3806	TR DTC114YS
Q405	405 154 5909	TR KRC231M
Q406	405 154 5909	TR KRC231M
Q407	405 143 0007	TR KRC107M-A
or	405 000 3806	TR DTC114YS
Q501	405 143 0007	TR KRC107M-A
or	405 000 3806	TR DTC114YS

REF.NO.	PART NO.	DESCRIPTION
Q502	405 143 0007	TR KRC107M-A
or	405 000 3806	TR DTC114YS
Q503	405 151 5209	TR KRA107M
or	405 000 0904	TR DTA114YS
Q504	405 141 3307	TR KTC3198-GR
Q507	405 138 6502	TR KTB1366Y
Q508	405 141 3307	TR KTC3198-GR
Q509	405 141 3307	TR KTC3198-GR
R428	402 082 4103	RESISTOR 1 J- 1/2W
SA001	411 021 6405	SCR S-TPG BIN 3X8,HEAT SINK IC401
SA002	411 021 6405	SCR S-TPG BIN 3X8,HEAT SINK Q507
SA003	411 021 6405	SCR S-TPG BIN 3X8,TUNER ASSY
SA004	411 021 6405	SCR S-TPG BIN 3X8,TUNER ASSY
SHANT	614 302 9977	SHIELD,ANTENA
TU001	645 036 3733	PWB,TUNER,AM/FM

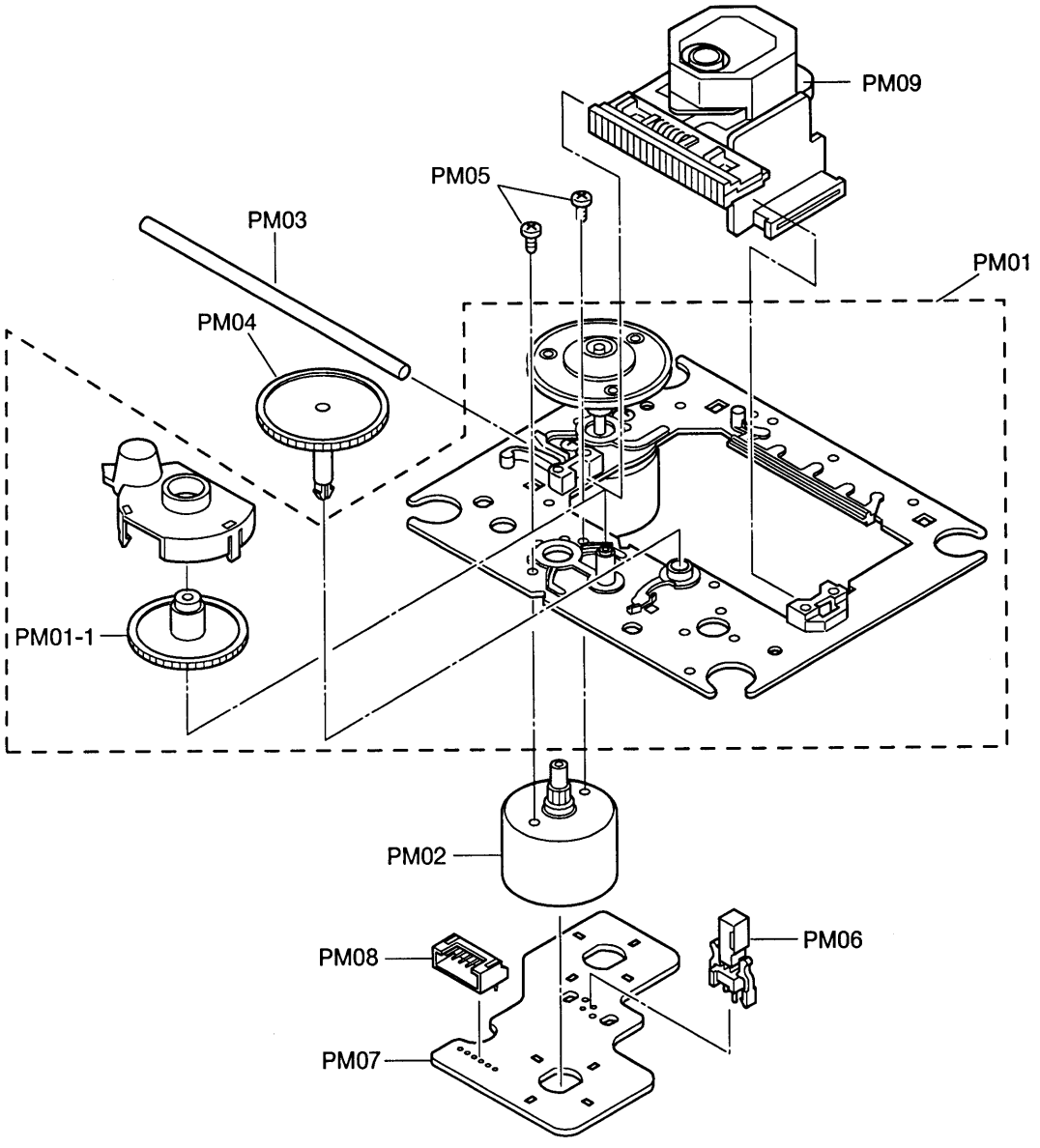
AC CORD P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
75	614 306 4831	ASSY,PWB,ACCORD (Only Initial)
T901	614 017 8203	TERMINAL BOARD
T902	614 017 8203	TERMINAL BOARD

TAPE MECHANISM (TM-DA300SM-SH . . . Only Initital)

REF.NO.	PART NO.	DESCRIPTION
TM01	614 304 8053	CHASSIS-MAIN,ASSY
TM02	614 304 8121	BRKT-HEAD,ASSY
TM03	614 304 8046	BASE-HEAD,ASSY
TM04	614 304 8077	PINCH-ROLLER,ASSY,F
TM05	614 304 8084	PINCH-ROLLER,ASSY,R
TM06	614 304 8060	ARM-P,ASSY
TM07	614 304 8091	FLYWHEEL-F,ASSY
TM08	614 304 8107	FLYWHEEL-R,ASSY
TM09	614 304 8138	MOTOR,ASSY
TM10	614 304 8152	CLUTCH,ASSY
TM11	614 304 8145	PWB,ASSY
TM12	614 304 8114	GEAR-P,ASSY
TM20	614 304 5878	CHIP-REEL
TM21	614 304 5885	BASE-REEL,C
TM22	614 304 6806	GEAR-CAM
TM23	614 304 6783	GEAR-IDLER
TM24	614 304 6622	LEVER-BRAKE
TM25	614 304 6653	ARM-CAM,LOCK
TM26	614 304 6660	ARM-RF
TM27	614 304 6776	GEAR-RF
TM29	614 304 8268	LEVER-EJECT
TM30	614 304 6684	LEVER-AC
TM31	614 304 6530	SHEET-PHOTO
TM40	614 304 6998	SPRING-B/T,R
TM41	614 304 6974	SPRING-LEVER,AC
TM43	614 304 6905	SPRING-BASE,HEAD
TM47	614 304 6929	SPRING-CAM-LOCK
TM49	614 304 6936	SPRING-ARM,RF
TM50	614 304 6875	SPRING-PINCH-RETURN,F
TM51	614 304 6967	SPRING-PINCH-RETURN,R
TM54	614 304 6837	SCREW-T
TM55	614 304 6820	SCREW-M
TM58	614 304 7438	WASHER-PLAIN
TM59	614 304 7421	WASHER-PLAIN
TM60	614 304 7445	WASHER-PLAIN
TM63	614 304 7476	BELT-SUB
TM64	614 304 7483	BELT-MAIN
TM67	614 304 7766	SPRING-B/T,F
TM76	614 304 7308	SOLENOID
TM89	614 304 7742	WASHER-PLATE

EXPLODED VIEW (CD MECHANISM)

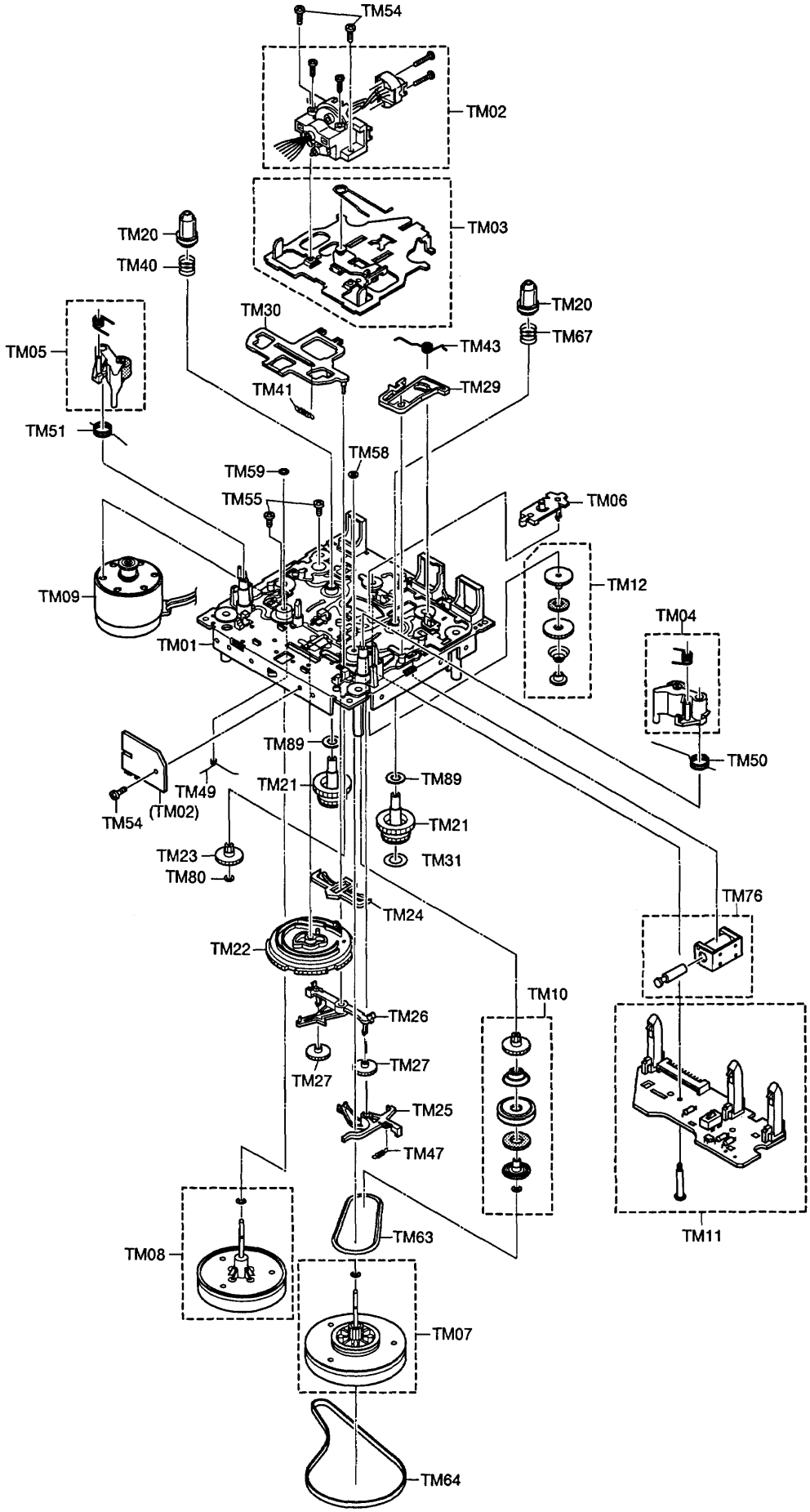


PARTS LIST

CD MECHANISM (CD213CDM/SNSH . . . Only Initial)

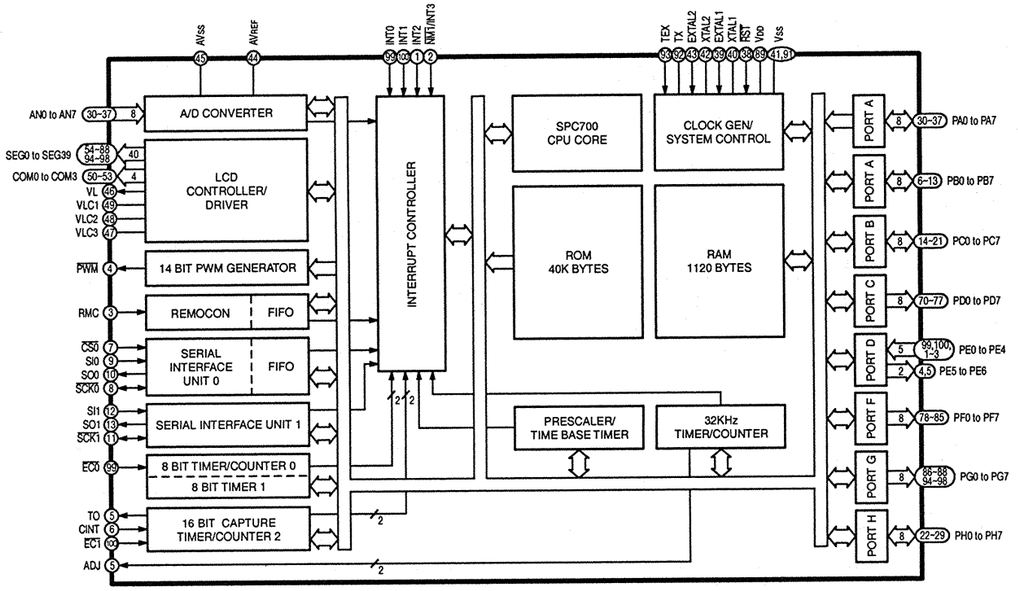
REF.NO.	PART NO.	DESCRIPTION
PM01	614 304 5571	ASSY,MOTOR CHASSIS,BASE
PM01-1	645 033 6812	GEAR B RP,SLED
PM02	645 033 6744	ASSY,MOTOR GEAR,SLED
PM03	645 033 6805	SLED SHAFT,PICK RAIL
PM04	645 033 6799	GEAR A S,PICK DRIVE
PM05	645 033 6829	SCREW+P2*3,SLED MOTOR FIX
PM06	645 033 6775	LEAF SWITCH,LIMIT
PM07	645 033 6782	MOTOR 6P S PWB
PM08	645 033 6768	CONNECTOR PIN 6P
PM09	614 303 5626	PICK UP

EXPLODED VIEW (TAPE MECHANISM)

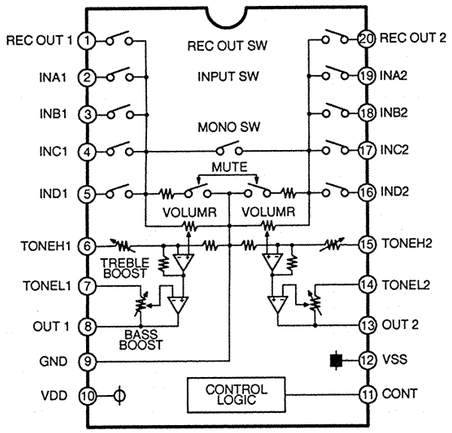


IC BLOCK DIAGRAM & DESCRIPTION

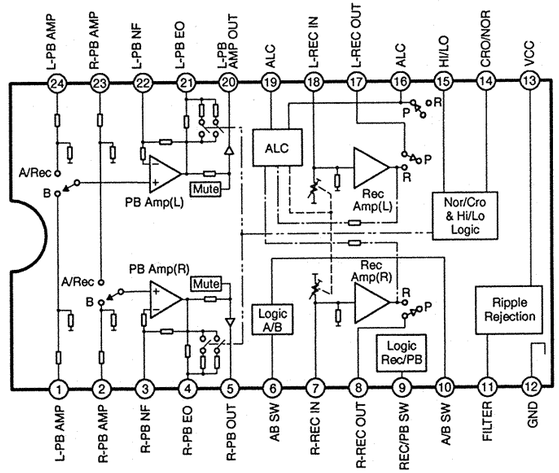
IC101 CXP83240A (CMOS 8bit 1chip Microcomputer)



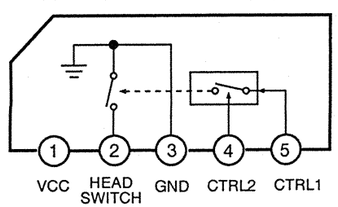
IC201 M62439SP (Sound Control)



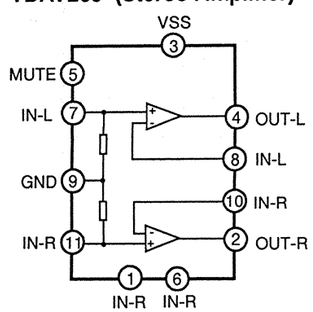
IC401 AN7348K (PLAY / REC Pre Amplifier)



IC402 BA7755A (Head Switch)

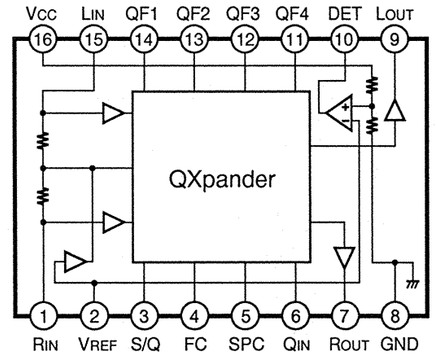


IC501 TDA7269 (Stereo Amplifier)

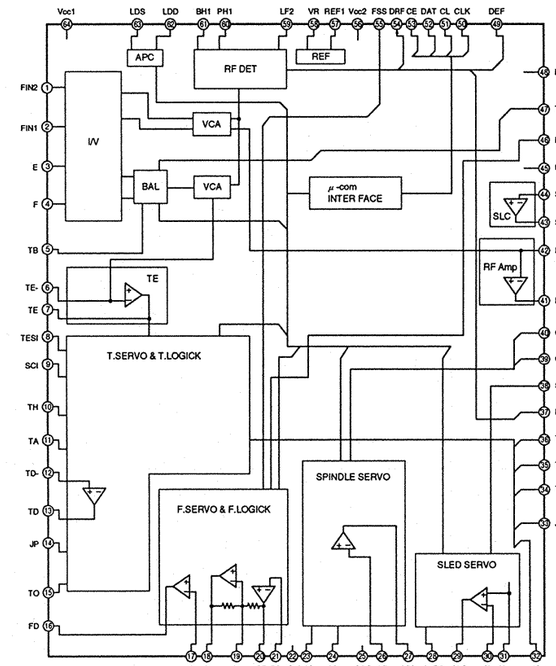


IC BLOCK DIAGRAM & DESCRIPTION

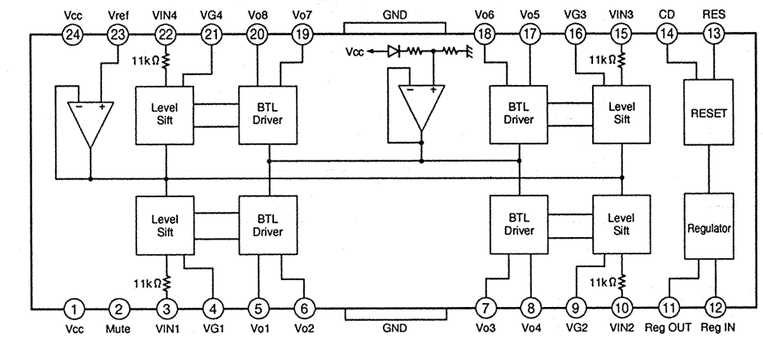
IC502 MM1434XFBE (QXpander with spread control)



IC601 LA9240ML (Servo Signal Processor)



IC603 LA6541 (Pick-up Actuator & Motor Driver)

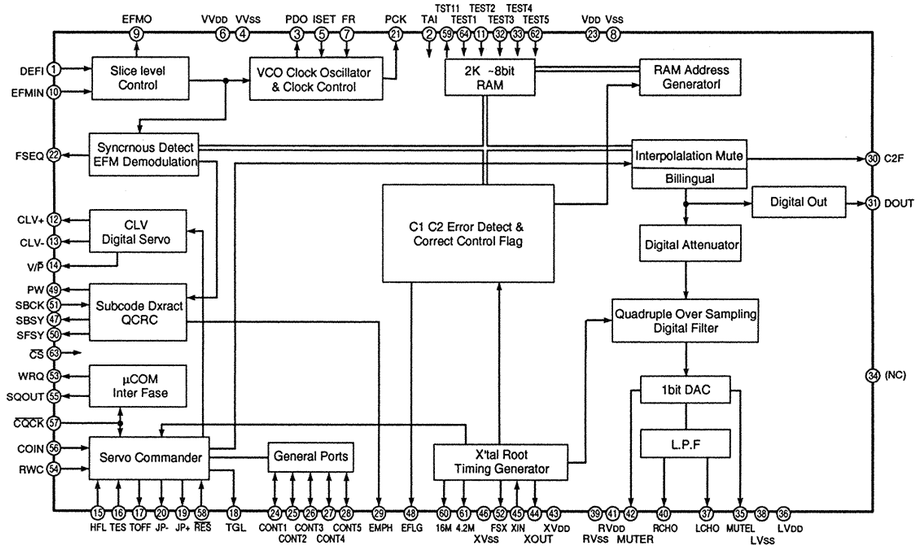


IC BLOCK DIAGRAM & DESCRIPTION

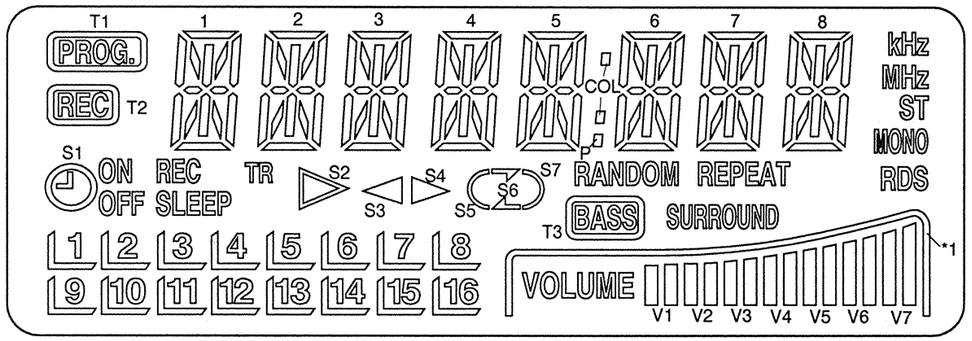
IC602 LC78622E (Digital Signal Processor)

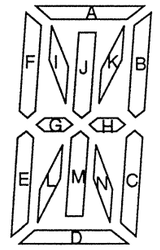
No.	Pin Name	I/O	Function
1	DEFI	I	Input terminal for detect signal of defect
2	TAI	I	Input terminal for test.
3	PDO	O	The phase comparison output terminal for external VCO control.
4	VVSS	-	Ground terminal for built-in VCO
5	ISET	I	Resistance connection terminal for electric current adjustment of PDO output.
6	VVDD	-	Built-in VCO power supply terminal.
7	FR	I	VCO frequency range adjustment.
8	VSS	-	Ground for Digital
9	EFMO	O	EFM signal output terminal for slice level control.
10	EFMIN	I	EFM signal input terminal for slice level control.
11	TEST2	I	TEST pin. Normal time is non connection.
12	CLV+	O	Output terminal for Disc motor control.
13	CLV-	O	Output terminal for Disc motor control.
14	V/P	O	Change of rough servo / phase control Rough servo : "H", Phase control : "L"
15	HFL	I	Input terminal of track search signal.
16	TES	I	Input terminal of tracking error signal.
17	TOFF	O	Output terminal of tracking off.
18	TGL	O	Output terminal for change of tracking gain.
19	JP+	O	Output terminal for tracking jump control.
20	JP-	O	Output terminal for tracking jump control.
21	PCK	O	Clock monitor output terminal for EFM data playback. (4.3218 MHz)
22	FSEQ	O	Output terminal for detect of SYNC signal.
23	DVDD	-	+5V
24	CONT1	I/O	This output can control at serial control from micro processor.
25	CONT2	I/O	
26	CONT3	I/O	
27	CONT4	I/O	
28	CONT5	I/O	
29	EMPH	O	Output terminal of de-emphasis monitor . "H" : de-emphasis
30	C2F	O	Output terminal of C2 flag
31	DOUT	O	Output terminal of digital out

No.	Pin Name	I/O	Function
32	TEST3	I	Test pin.
33	TEST4	I	Test pin.
34	NC	-	Non connection.
35	MUTEL	O	Mute output terminal for L-ch
36	LVDD	-	Power supply for L-ch
37	LCHO	O	Output terminal for L-ch
38	LVSS	-	GND for L-ch
39	RVSS	-	GND for R-ch
40	RCHO	O	Output terminal for R-ch
41	RVDD	-	Power supply for R-ch
42	MUTER	O	Mute output terminal for R-ch
43	XVDD	-	Power supply of crystal oscillation
44	XOUT	O	Connection terminal of crystal oscillation (16.9344MHz)
45	XIN	I	Connection terminal of crystal oscillation (16.9344MHz)
46	XVSS	-	GND of crystal oscillation
47	SBSY	O	Output terminal for synchronizing signal of sub-cord block
48	EFLG	O	Output terminal for correction monitor of C1, C2, Single and Double
49	PW	O	Output terminal for sub-cord of P, Q, R, S, T, U and W
50	SFSY	O	Output terminal for synchronizing signal of sub-cord frame
51	SBCK	I	Input terminal for readout clock of sub-cord
52	FSX	O	Output terminal of Synchronizing signal (7.35kHz)
53	WRQ	O	Output terminal for standby of sub-cord Q output
54	RWC	I	Input terminal of read / write control
55	SQOUT	O	Output terminal of sub-cord Q
56	COIN	I	Input terminal of command from micro processor
57	CQCK	I	Clock input for reading sub-cord from SQOUT
58	RES	I	Reset (turn on : L)
59	TST11	O	Test pin
60	16M	O	16.9344MHz
61	4.2M	O	4.2336MHz
62	TEST5	I	Test pin
63	CS	I	Chip select terminal
64	TEST1	I	Test pin



FL DISPLAY DESCRIPTION

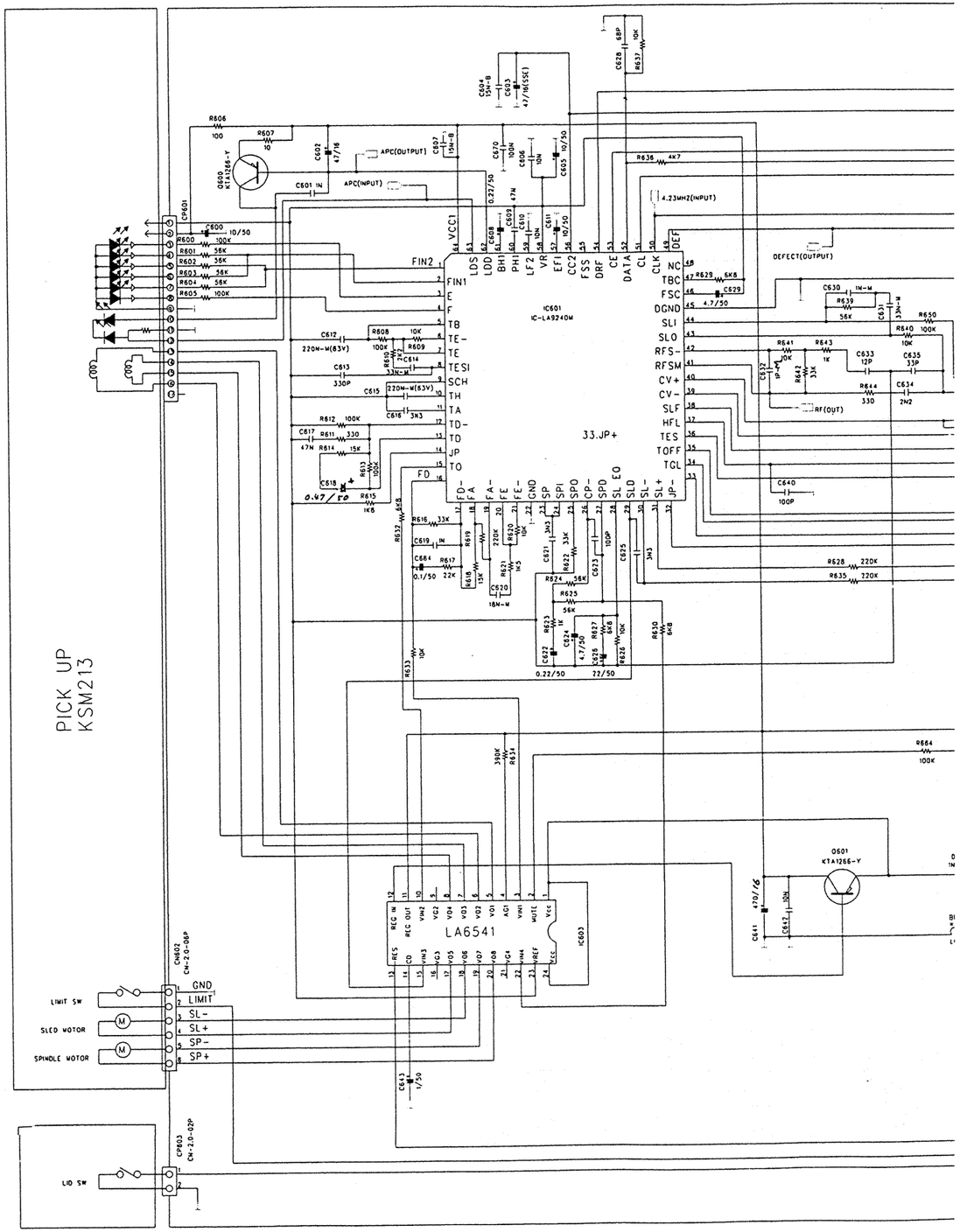




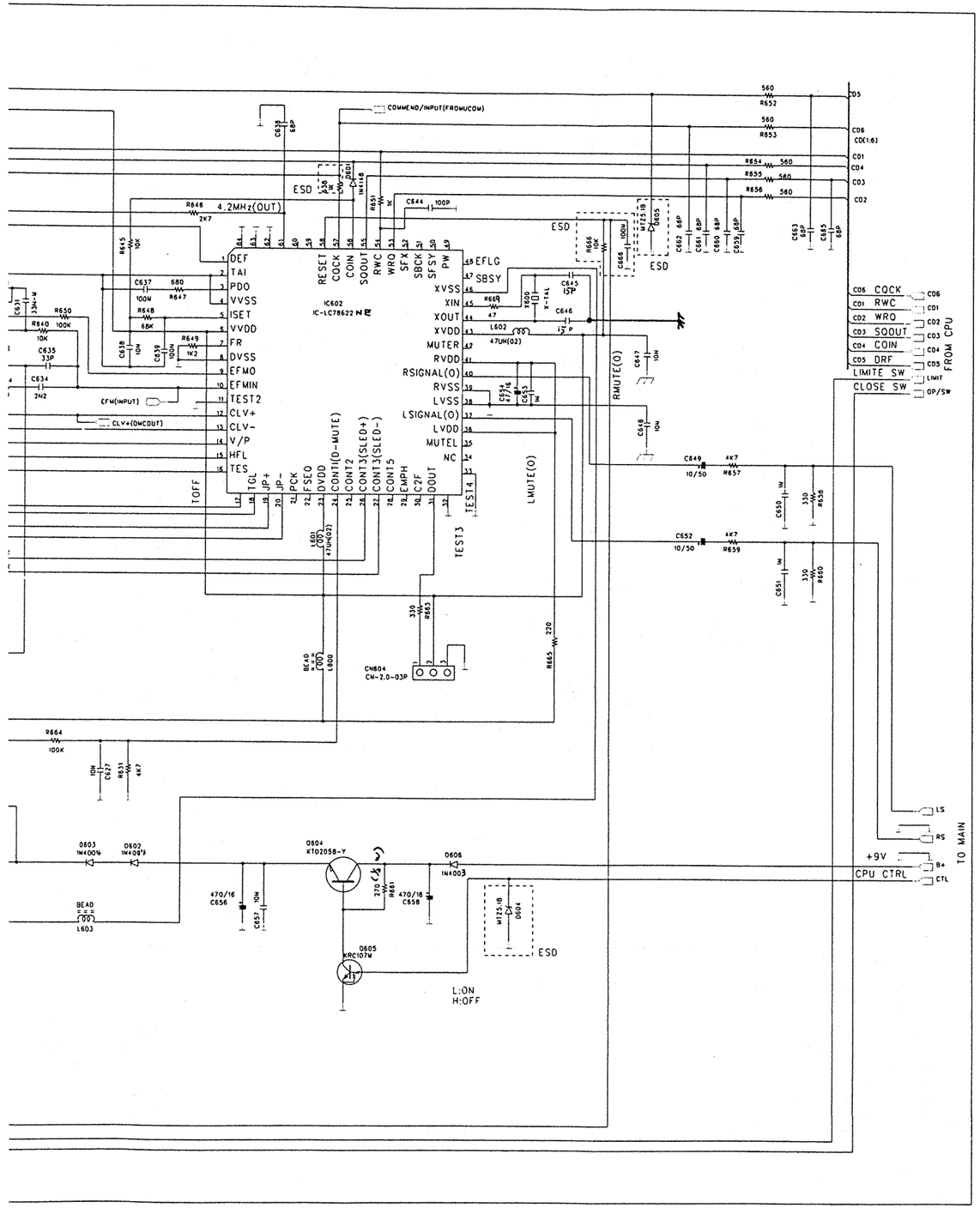
	COM1	COM2	COM3	COM4
1	COM1	-	-	-
2	-	COM2	-	-
3	-	-	COM3	-
4	-	-	-	COM4
5	1F	1G	1E	OFF
6	1A	1I	1M	1L
7	1K	1J	1N	1D
8	1B	1H	1C	REC
9	2F	2G	2E	SLEEP
10	2A	2I	2M	2L
11	2K	2J	2N	2D
12	2B	2H	2C	S2
13	3F	3G	3E	S3
14	3A	3I	3M	3L
15	3K	3J	3N	3D
16	3B	3H	3C	S4
17	4F	4G	4E	S5
18	4A	4I	4M	4L
19	4K	4J	4N	4D
20	4B	4H	4C	S6
21	5F	5G	5E	S7
22	5A	5I	5M	5L

	COM1	COM2	COM3	COM4
23	5K	5J	5N	5D
24	5B	5H	5C	COL
25	6F	6G	6E	P
26	6A	6I	6M	6L
27	6K	6J	6N	6D
28	6B	6H	6C	RANDOM
29	7F	7G	7E	SURR.
30	7A	7I	7M	7L
31	7K	7J	7N	7D
32	7B	7H	7C	REPEAT
33	8F	8G	8E	MHz
34	8A	8I	8M	8L
35	8K	8J	8N	8D
36	8B	8H	8C	KHz
37	T1	T2	ON	S1
38	ST	MONO	RDS	T3
39	2	10	1	9
40	4	12	3	11
41	6	14	5	13
42	8	16	7	15
43	*1	V1	V2	V3
44	V4	V5	V6	V7

SCHEMATIC DIAGRAM (CD <1/2>)

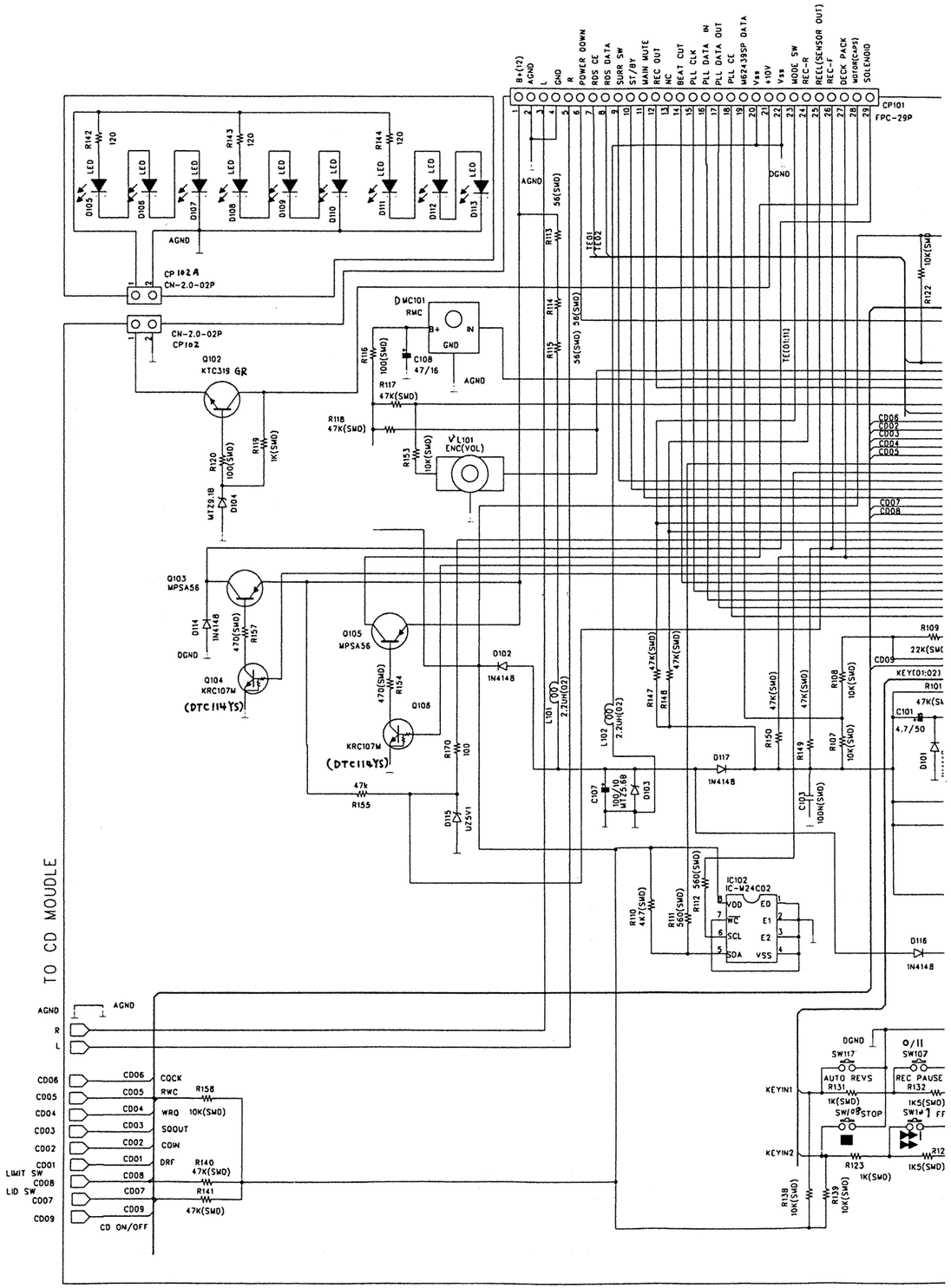


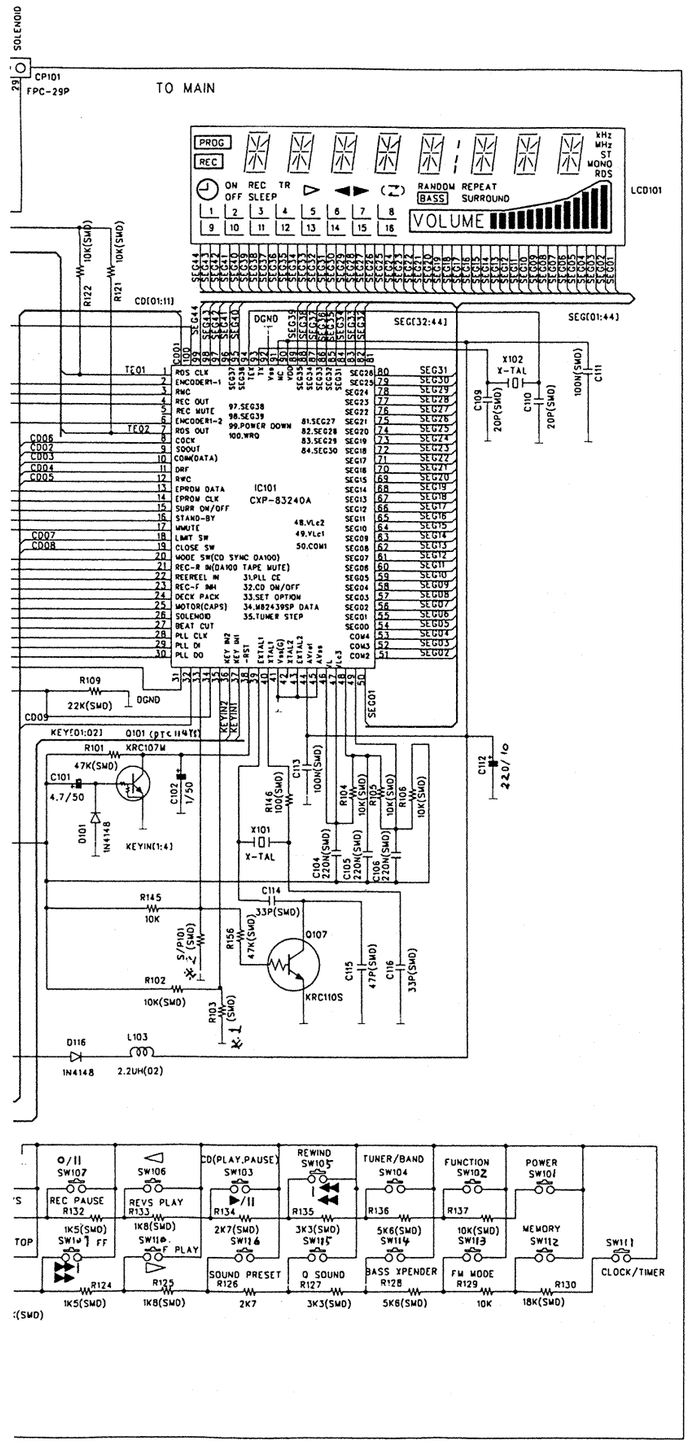
SCHEMATIC DIAGRAM (CD <2/2>)



This is a basic schematic diagram.

SCHEMATIC DIAGRAM (FRONT <1/2>)





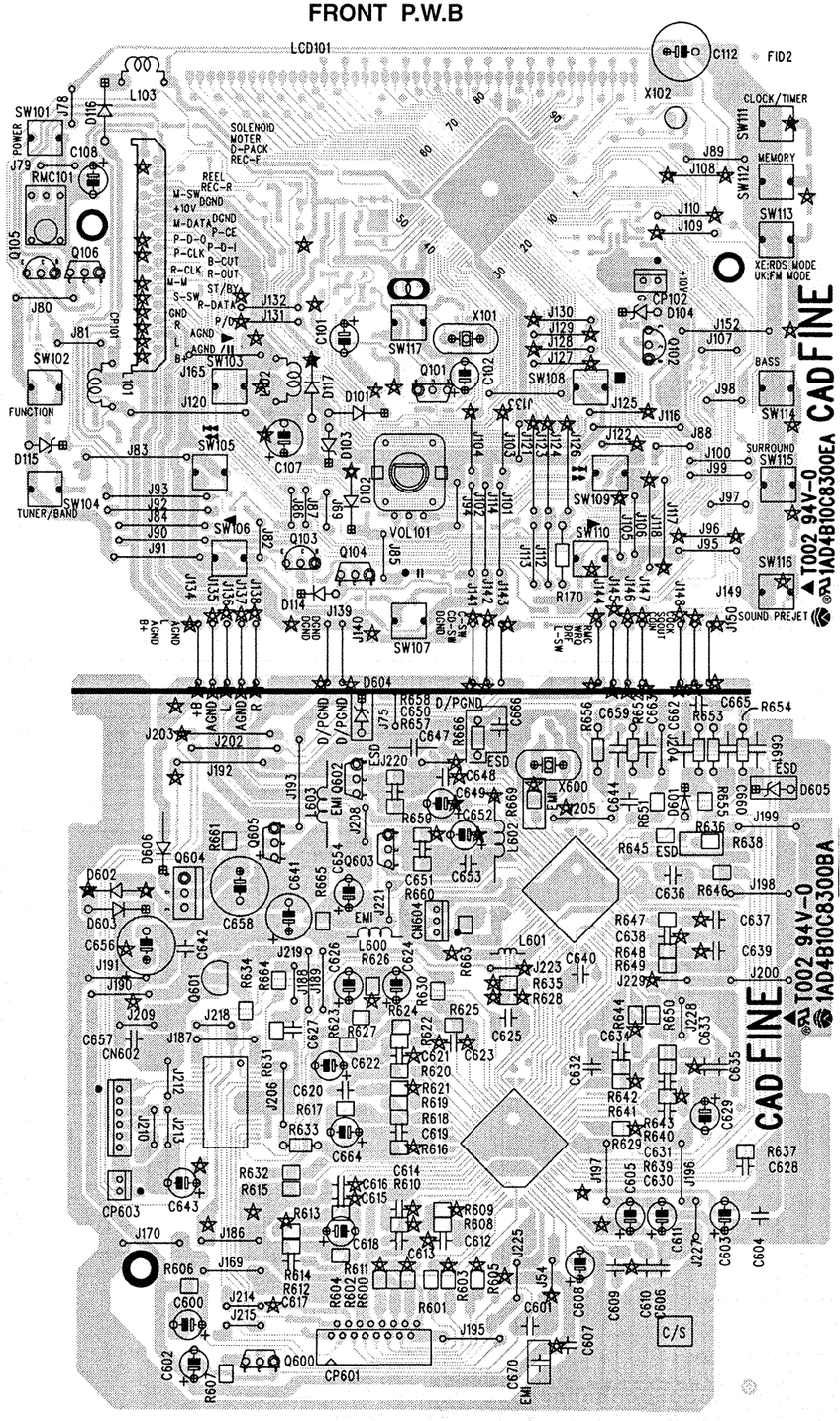
REF NO / VERSION	STEP	R103
EUROPE 2BAND	50K 9K	GND
EUR 3BAND	50K 9K	4K7
S-SS	50K 9K	10K
UL/CSA	200K 10K	22K
NX/JP		OPEN

REF NO / SET OPTION	S/P101
VIDEO AUX (WITHOUT RDS)	4K7(UK)
VIDEO DVD (WITHOUT RDS)	10K
VIDEO AUX (WITH RDS)	22K(XE)
VIDEO DVD (WITH RDS)	OPEN

This is a basic schematic diagram.

WIRING DIAGRAM (CD, FRONT, LED <TOP VIEW>)

FRONT P.W.B

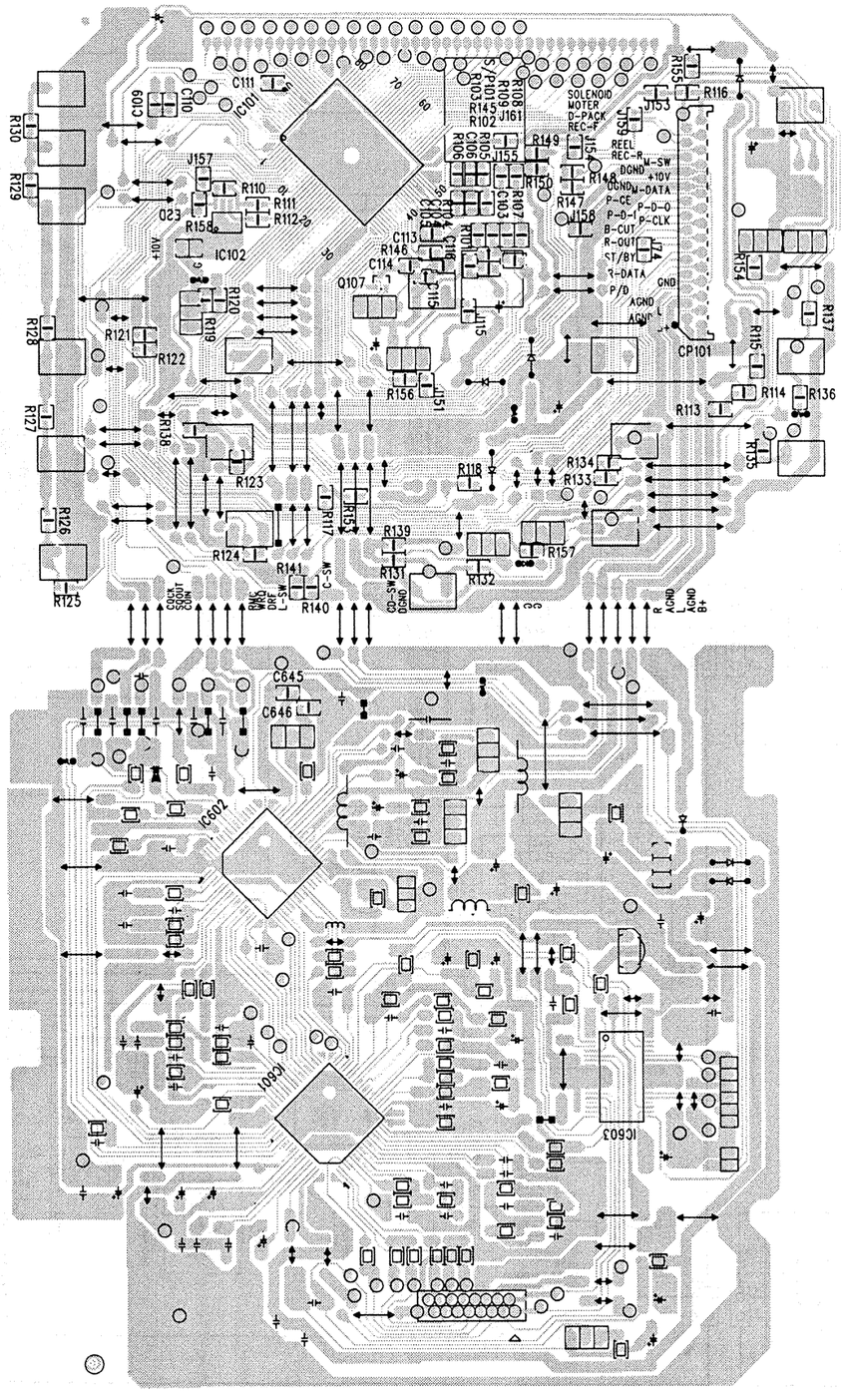


LED P.W.B

CD P.W.B

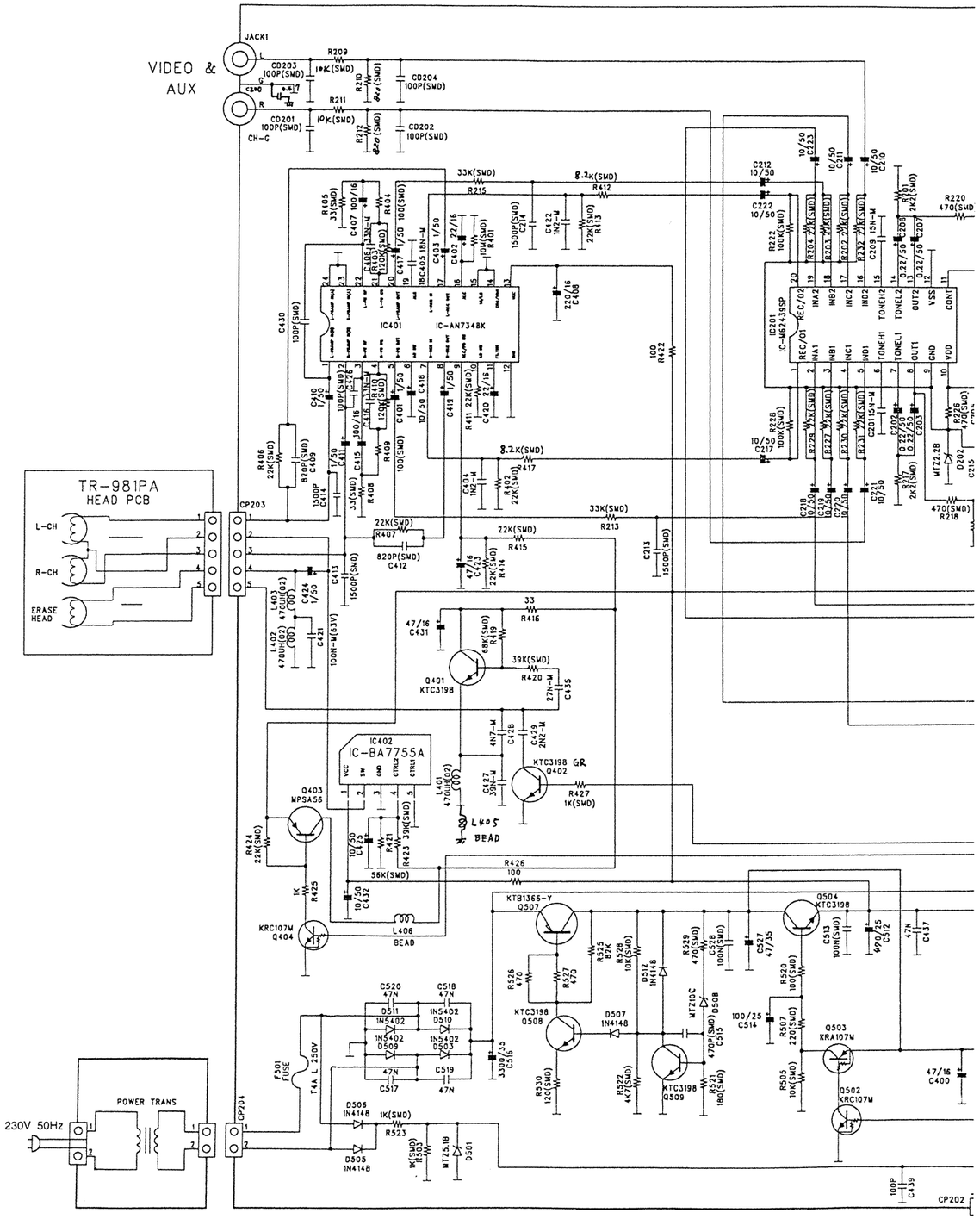
WIRING DIAGRAM (CD, FRONT <BOTTOM VIEW>)

FRONT P.W.B



CD P.W.B

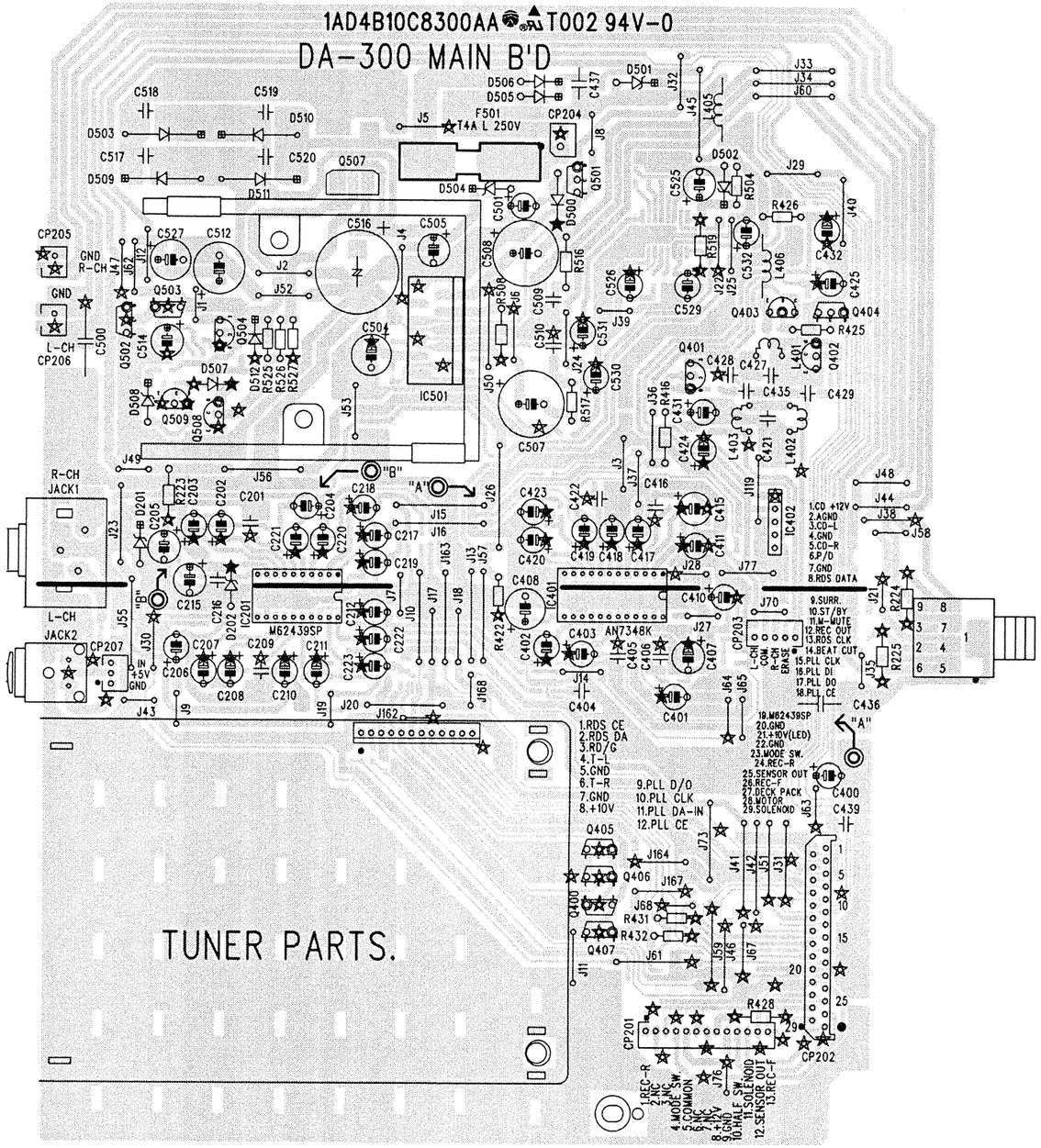
SCHEMATIC DIAGRAM (AMPLIFIER <1/2>)



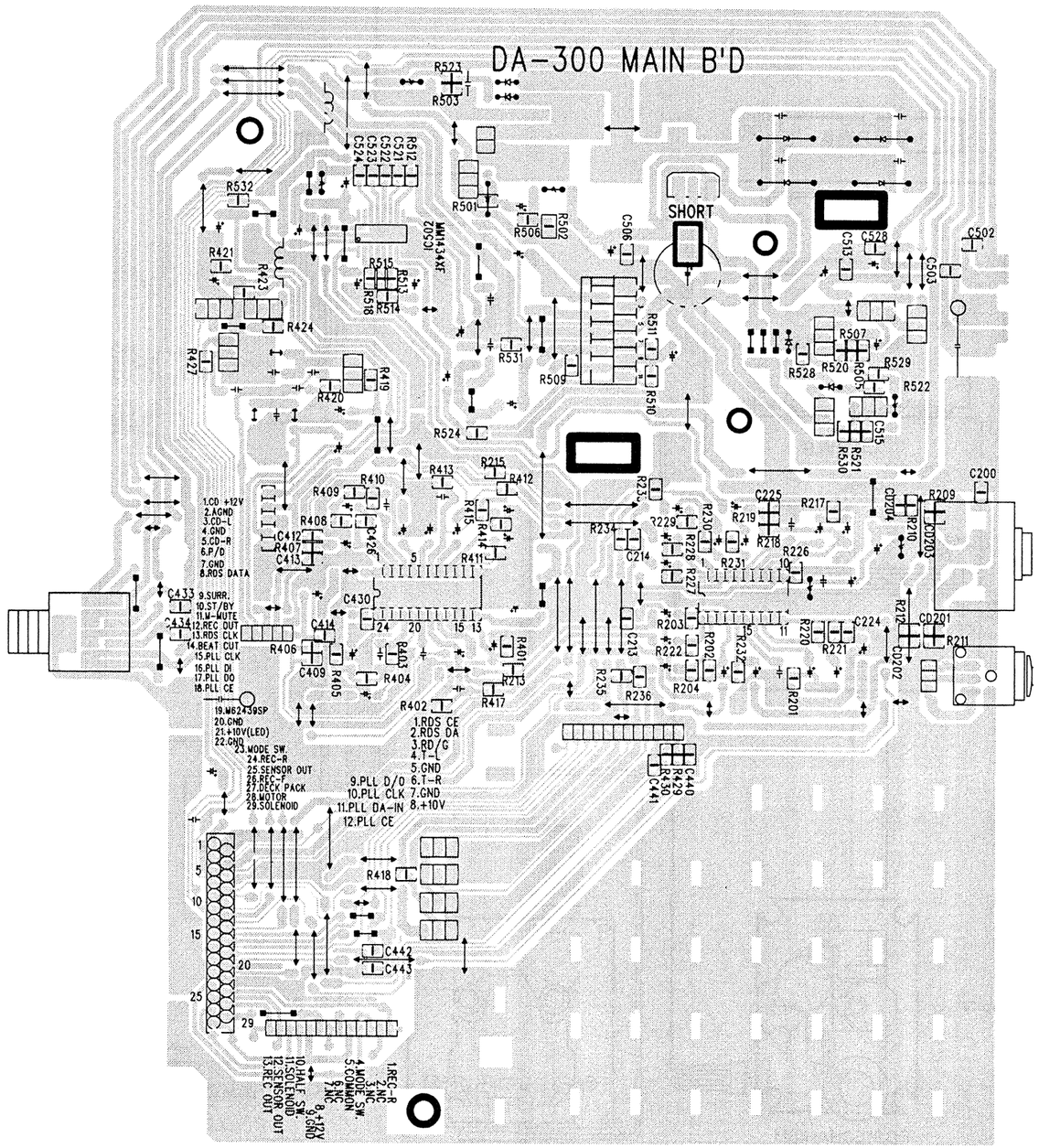
This is a basic schematic diagram.

SCHEMATIC DIAGRAM (AMPLIFIER <2/2>)

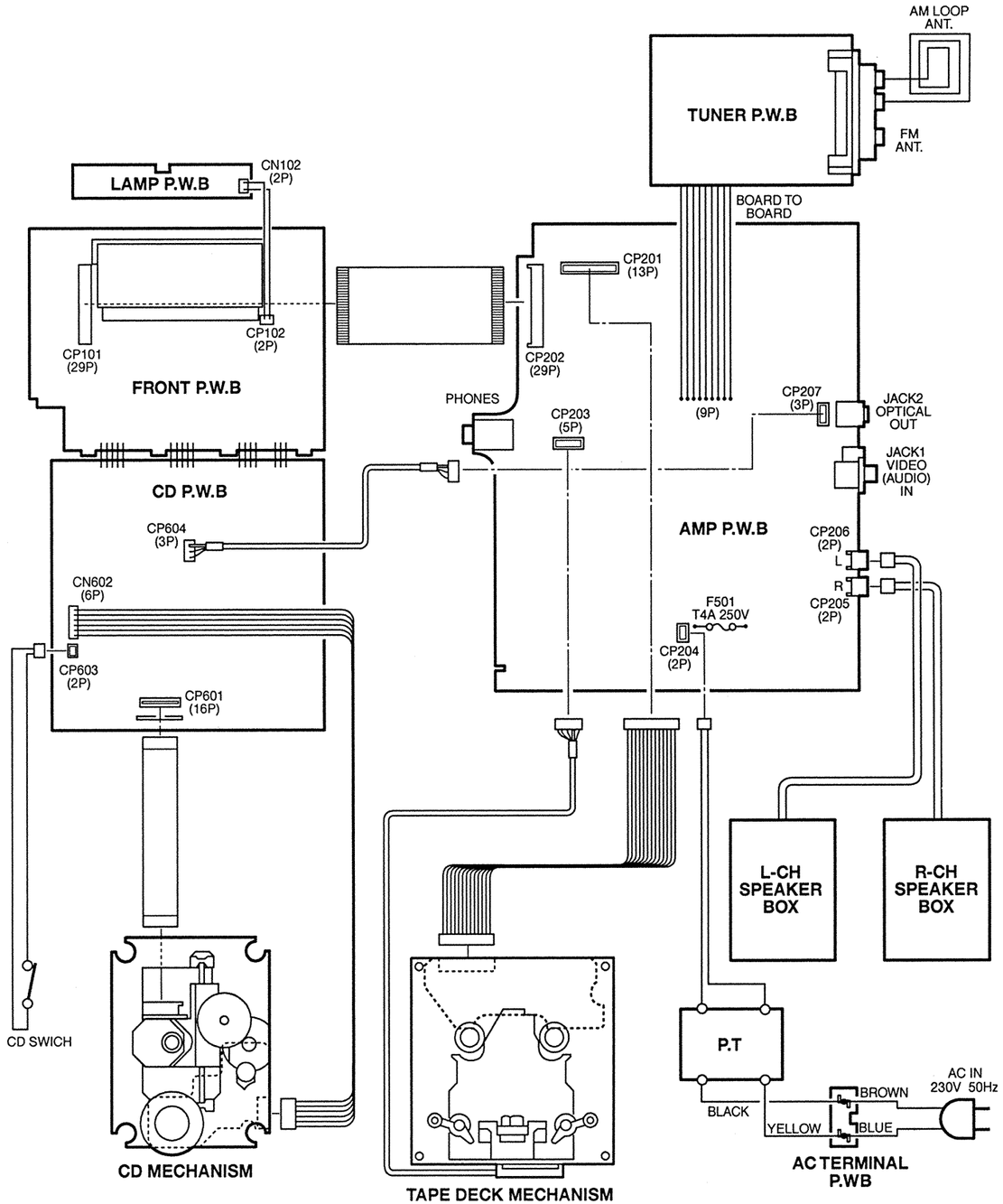
WIRING DIAGRAM (AMPLIFIER <TOP VIEW>)



WIRING DIAGRAM (AMPLIFIER <BOTTOM VIEW>)



WIRING CONNECTION



Aug. / '99 / 2300 NS Printed in Japan

SANYO

SANYO Technosound Co., Ltd.
Osaka, Japan